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SOIL SURVEY INTERPRETATIONS FOR WOODLANDS  
IN THE  
SOUTHERN COASTAL PLAIN AND COASTAL FLATWOODS  
OF ALABAMA AND MISSISSIPPI  
With Average Rainfall of 30- to 42-Inches  
During the Frost-Free Period

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PROGRESS REPORT W-15 -- DECEMBER 1969

UNITED STATES DEPARTMENT OF AGRICULTURE  
Soil Conservation Service  
Fort Worth, Texas



This report contains interpretations of soil surveys for woodland use and management in the Southern Coastal Plain and Coastal Flatwood areas of Alabama and Mississippi, with mean precipitation of 30- to 42-inches during the frost-free period. The purpose is to provide currently available knowledge about soils as they relate to the establishment, growth, management, and harvesting of wood crops for the use of foresters, agricultural workers, woodland owners, and woodland managers. The information will be used by the Soil Conservation Service and cooperating agencies in the development of technical guides, soil handbooks, and published soil survey reports.

Field information was gathered by teams of foresters and soil scientists. Representatives of Federal and State agencies, the woodusing industry, and others cooperated in gathering field data. Much of the information concerning the productivity and soil suitability of southern hardwoods was compiled by Walter M. Broadfoot of the U. S. Forest Service, Southern Forest Experiment Station. The interpretations presented herein are made for use with soil surveys.

Table 2, SOIL RATINGS FOR WOODLAND USE, includes some evaluations for individual soils. The soil series listed in column one (1) are those defined according to the current soil classification system and includes portions of soil associations mapped in low intensity surveys. Erosion and texture phases, within a soil series, are not shown except where differences in productivity, species suitability, or management problems exist.

Column two (2) includes a list of some of the commercially-important tree species which are adapted to the soil in column one. These are the

tree species which woodland managers generally favor in intermediate or improvement cuttings, after considering the form and vigor of individual trees. Priority between species will be influenced by local marketability and the owners' objectives, as well as the quality of wood products from a given species.

Column three (3) indicates the average site index for the most important species listed in column two. The standard deviation is shown as a plus or minus figure (+) for each species where five or more plots were taken. The site index curves used for each tree species are shown in Table 1, GUIDE FOR WOODLAND SUITABILITY CLASSES. Site index is the average height of dominant trees at age 30 for cottonwood, age 35 for sycamore, and age 50 for all other species.

Column four (4) indicates the range of site index of the most important tree species in column two. The range of site index values is dependent on soil physical conditions, aeration, and nutrient and moisture availability during the growing season. On most upland soils, the site index is slightly higher in the southern portion of this area than in the northern portion.

Column five (5) evaluates the potential erosion hazard of the soil in woodland use following cutting operations, or where the soil is exposed along roads, trails, firebreaks, or log-yarding areas. A rating of slight indicates that problems of erosion control are unimportant. A rating of moderate indicates some attention must be given to prevent unnecessary soil erosion. A rating of severe indicates that intensive treatments, or special equipment and methods of operation should be planned to minimize soil erosion. The potential erosion hazard is based on slope, soil depth and erodibility, and soil loss tolerance.



Column six (6) includes evaluation of equipment restrictions. Ratings reflect limitations in the use of equipment for managing or harvesting the tree crop. A rating of slight indicates equipment use is seldom limited in kind or time of year. A rating of moderate indicates a need for modified equipment or seasonal restrictions due to slope, stones, obstructions, soil wetness, flooding, or overflows. A rating of severe indicates the need for specialized equipment due to one or more of the factors listed above.

Column seven (7) indicates the degree of expected seedling mortality during the first two growing seasons after planting or seeding. Normal rainfall, adequate site preparation, good planting stock, proper planting methods, and appropriate protection and cultivation are assumed. A rating of slight indicates that unsatisfactory survival on less than 25 percent of the area is likely. A rating of moderate indicates that unsatisfactory survival is likely on 25 to 50 percent of the area planted. A rating of severe indicates that unsatisfactory survival is likely on more than 50 percent of the area.

Column eight (8) lists several suitable tree species for planting on the soil named in column one. The list may include some species which do not normally occur in native stands on the designated soil or in this physiographic area, as well as some of the important species listed in column two.

Column nine (9) shows the ordination of the soils into a woodland suitability group. A woodland suitability group is made up of kinds of soils that are capable of producing similar kinds of wood crops, that need similar management to produce these crops, and that have about the same

potential productivity. The ordination system and the suitability group symbols are explained in the following paragraphs.

The first element of the group symbol indicates the woodland suitability class. It expresses site quality by an arabic numeral ranging from 1 to 5, with class 1 the highest in potential productivity, followed by class 2, 3, 4, and 5. It is based on the average site index of one or more indicator forest types or tree species, as shown in Table 1, GUIDE FOR WOODLAND SUITABILITY CLASSES. The indicator species are under-scored in column two of Table 2.

The second element in the symbol indicates the suitability subclass. It expresses selected soil properties that cause moderate to severe hazards or limitations in woodland use or management, by one of the following lower case arabic letters:

Subclass w (excessive wetness). Soils in which excessive water, either seasonally or year long, causes significant limitations for woodland use or management. These soils have restricted drainage, high water tables, or overflow hazards which adversely affect either stand development or management.

Subclass c (clayey soils). Soils having restrictions or limitations for woodland use or management due to the kind or amount of clay in the upper portion of the soil profile.

Subclass s (sandy soils). Sandy soils with little or no textural B horizons and having moderate to severe restrictions or limitations for woodland use or management. These soils impose equipment limitations, have low moisture-holding capacity, and normally are low in available plant nutrients.



Subclass f (fragmental or skeletal soils). Soils with restrictions or limitations for woodland use or management due to large amounts of coarse fragments in the profile over 2 mm and less than 10 inches, but includes flaggy soils.

Subclass o (slight or no limitations). Soils with no significant restrictions or limitations for woodland use or management.

Some kinds of soil may have more than one set of subclass characteristics. Priority in placing each kind of soil into a subclass is in the order that the subclass characteristics are listed above.

The third element in the symbol indicates the degree of hazards or limitations, and the general suitability of the soils for certain kinds of trees. The three management problems considered here are: (1) erosion hazard, (2) equipment restrictions, and (3) seedling mortality.

The numeral 1 indicates soils with no to slight management problems, and they are best suited for needleleaf trees.

The numeral 2 indicates soils with one or more moderate management problems, and they are best suited for needleleaf trees.

The numeral 3 indicates soils with one or more severe management problems, and they are best suited for needleleaf trees.

The numeral 4 indicates soils with no to slight management problems, and they are best suited for broadleaf trees.

The numeral 5 indicates soils with one or more moderate management problems, and they are best suited for broadleaf trees.

The numeral 6 indicates soils with one or more severe management problems, and they are best suited for broadleaf trees.

The numeral 7 indicates soils with no to slight management problems, and they are suitable for either needleleaf or broadleaf trees.

The numeral 8 indicates soils with one or more moderate management problems, and they are suitable for either needleleaf or broadleaf trees.

The numeral 9 indicates soils with one or more severe management problems, and they are suitable for either needleleaf or broadleaf trees.

TABLE 1 - GUIDE FOR WOODLAND SUITABILITY CLASSES  
SOUTHERN COASTAL PLAIN

INDICATOR FOREST TYPE OR SPECIES	:	1	:	2	:	3	:	4	:	5
	:	Very	:	High	:	Moderately	:	Moderate	:	Low
	:	High	:		:	High	:		:	
	:	Site Index								
	:		:		:		:		:	
Cottonwood	(1):	106+	:	96-105	:	86-95	:	76-85	:	75-
Yellow-poplar	(2):	106+	:	96-105	:	86-95	:	76-85	:	75-
Sweetgum	(3):	96+	:	86-95	:	76-85	:	66-75	:	65-
Water oak	(4):	96+	:	86-95	:	76-85	:	66-75	:	65-
Loblolly pine	(5):	96+	:	86-95	:	76-85	:	66-75	:	65-
Slash pine	(6):	96+	:	86-95	:	76-85	:	66-75	:	65-
Shortleaf pine	(5):	86+	:	76-85	:	66-75	:	56-65	:	55-
Longleaf pine	(6):	86+	:	76-85	:	66-75	:	56-65	:	55-
Sou.-red oak	(7):	86+	:	76-85	:	66-75	:	56-65	:	55-
Water tupelo	(8):	86+	:	76-85	:	66-75	:	56-65	:	55-
	:		:		:		:		:	

- (1) Broadfoot, W. M. 1960, Field Guide for Evaluating Cottonwood Sites, USFS Occ. Paper 178 (Fig. 4).
- (2) Doolittle, W. T., 1957, Site Index Curves for Yellow-poplar-So. Appalachians.
- (3) Broadfoot, W. M. 1959, Guide for Evaluating Sweetgum Sites, USFS Occ. Paper 176 (Fig. 4).
- (4) Broadfoot, W. M. 1963, Guide for Evaluating Water Oak Sites in the Mid-South, USFS Res. Paper SO-1 (Fig. 4).
- (5) Coile, T. S. and F. X. Schumacher, Jour. For. 53:432-453 (Fig. 4 and 8).
- (6) U. S. Forest Service, 1929 Volume, Yield, and Stand Tables for Second Growth Southern Pines, USDA Misc. Publ. 50 (Fig. 2, 3, 4).
- (7) Schnur, L. G. 1937, Yield, Stand, and Volume Tables for Even-Aged Upland Oak Forests, USDA Tech. Bul. 560 (Fig. 2).
- (8) Applequist, M. D. 1959, Soil-Site Studies, Sou. Hardwoods (Fig. 7).

TABLE 2. SOIL RATINGS FOR WOODLAND USE

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Southern Coastal Plain and Coastal Flatwoods of Alabama and Mississippi

Soils	Potential Productivity			Management Problems			Species Suitable for Planting	Ordination Woodland Suitability Group
	Tree Species	Avg. Site Index & Standard Deviation	Range of Site Index	Erosion Hazard	Equipment Restriction	Seedling Mortality		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Adaton 0-2% slopes	Loblolly pine <u>1/</u> Slash pine <u>1/</u> Sweetgum <u>1/</u> Green ash Red oaks	90 90 90 - -	85-95 85-95 85-95 - -	Slight	Severe <u>2/</u>	Severe <u>2/</u>	Slash pine <u>3/</u> Loblolly pine <u>3/</u> Sweetgum <u>3/</u> Sycamore <u>3/</u> Nuttall oak	2w9
Alaga 0-25% slopes	Loblolly pine Slash pine Longleaf pine	81±6 80 65±5	72-88 73-87 60-71	Slight	Moderate	Moderate	Slash pine Longleaf pine	3s2
Alapaha 0-5% slopes	Slash pine Loblolly pine Longleaf pine	87 87 70	77-93 78-92 60-75	Slight	Moderate	Moderate	Slash pine Loblolly pine	2w2
Albany 0-5% slopes	Slash pine Loblolly pine Longleaf pine	80 80 67	72-88 72-88 60-75	Slight	Moderate	Moderate	Slash pine Loblolly pine	3w2
Americus 0-17% slopes	Slash pine Loblolly pine Longleaf pine	84 84 70	78-89 78-89 66-75	Slight	Moderate	Moderate	Slash pine Longleaf pine	3s2
Amy 0-2% slopes	Loblolly pine <u>1/</u> Sweetgum <u>1/</u> Water oak Green ash Red oaks	90 90 90 - -	84-96 84-96 - - -	Slight	Severe <u>2/</u>	Severe <u>2/</u>	Loblolly pine <u>3/</u> Slash pine <u>3/</u> Sycamore <u>3/</u> Nuttall oak Sweetgum <u>3/</u>	2w9
Angie 0-8% slopes	Loblolly pine Sweetgum Blackgum Water oak Red oaks	90 90 - 90 -	85-95 83-96 - - -	Slight	Severe	Severe	Loblolly pine Slash pine Sycamore Sweetgum Yellow-poplar	2w8
Ardilla 0-5% slopes	Slash pine Longleaf pine Sweetgum Blackgum Water oak	89±4 78 90 - 90	80-95 73-84 - - 82-98	Slight	Moderate	Slight	Slash pine Loblolly pine Sycamore Sweetgum Yellow-poplar	2w8
Atmore 0-2% slopes	Slash pine <u>1/</u> Loblolly pine <u>1/</u> Longleaf pine <u>1/</u> Sweetgum <u>1/</u> Green ash Red oaks	85 85 73±4 85 - -	75-90 77-92 67-78 80-90 - -	Slight	Severe <u>2/</u>	Severe <u>2/</u>	Slash pine <u>3/</u> Loblolly pine <u>3/</u> Sweetgum <u>3/</u> Sycamore <u>3/</u> Nuttall oak	3w9
Aycock 1-12% slopes	Slash pine Loblolly pine Longleaf pine Red oaks White oaks	89 89 75 - -	84-94 84-94 70-80 - -	Slight	Slight	Slight	Slash pine Loblolly pine	2o1

1/ Potential productivity attainable only on areas with adequate surface drainage.2/ Equipment restrictions and seedling mortality moderate on areas with adequate surface drainage.3/ Tree planting is feasible only on areas with adequate surface drainage.

TABLE 2. SOIL RATINGS FOR WOODLAND USE  
Southern Coastal Plain and Coastal Flatwoods of Alabama and Mississippi

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Soils	Potential Productivity			Management Problems			Species Suitable for Planting	Ordination Woodland Suitability Group
	Tree Species	Avg. Site Index & Standard Deviation	Range of Site Index	Erosion Hazard	Equipment Restriction	Seedling Mortality		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<u>Barth</u> 0-5% slopes	<u>Slash pine</u> <u>Loblolly pine</u> <u>Longleaf pine</u>	83 83 75	75-90 75-90 70-80	Slight	Moderate	Moderate	<u>Slash pine</u> <u>Loblolly pine</u>	3w2
<u>Basin</u> 0-5% slopes	<u>Loblolly pine</u> <u>Slash pine</u> <u>Sweetgum</u> <u>Water oaks</u> <u>Blackgum</u>	90 90 90 90 -	85-95 85-95 85-95 85-95 -	Slight	Moderate	Moderate	<u>Slash pine</u> <u>Loblolly pine</u> <u>Sweetgum</u> <u>Shumard oak</u> <u>Sycamore</u>	2w8
<u>Baxterville</u> 0-12% slopes	<u>Slash pine</u> <u>Loblolly pine</u>	86+5 86	79-91 80-90	Slight	Slight	Slight	<u>Slash pine</u> <u>Loblolly pine</u>	2o1
<u>Bayboro</u> 0-5% slopes	<u>Slash pine</u> 1/ <u>Loblolly pine</u> 1/ <u>Sweetgum</u> 1/ <u>Tupelos</u> <u>Red oaks</u>	95+5 95 94+3 - -	87-103 87-103 80-100 - -	Slight	Severe 2/	Severe 2/	<u>Slash pine</u> 3/ <u>Loblolly pine</u> 3/ <u>Sweetgum</u> 3/ <u>Sycamore</u> 3/ <u>Water tupelo</u>	2w9
<u>Benndale</u> 0-12% slopes	<u>Slash pine</u> <u>Loblolly pine</u> <u>Longleaf pine</u> <u>Red oaks</u> <u>White oaks</u>	94+6 94 79+4 - -	87-100 - 74-84 - -	Slight	Slight	Slight	<u>Slash pine</u> <u>Loblolly pine</u>	2o1
<u>Bibb</u> 0-2% slopes	<u>Sweetgum</u> 1/ <u>Loblolly pine</u> 1/ <u>Slash pine</u> 1/ <u>Water oak</u> 1/ <u>Green ash</u> <u>Cottonwood</u> <u>Sycamore</u> 1/ <u>Tupelos</u> <u>Red oaks</u> <u>White oaks</u>	90+9 92+6 90 90+10 86+2 100 - - - -	78-97 84-100 82-98 78-100 64-98 80-110 - - - -	Slight	Severe 2/	Severe 2/	<u>Loblolly pine</u> 3/ <u>Sycamore</u> 3/ <u>Cottonwood</u> 3/ <u>Green ash</u> 3/ <u>Nuttall oak</u>	2w9
<u>Bladen</u> 0-2% slopes	<u>Loblolly pine</u> 1/ <u>Slash pine</u> 1/ <u>Sweetgum</u> 1/ <u>Tupelos</u> <u>Red oaks</u> <u>White oaks</u> <u>Water oak</u>	94+3 91 90 - - - -	88-102 85-100 - - - - -	Slight	Severe 2/	Severe 2/	<u>Loblolly pine</u> 3/ <u>Slash pine</u> 3/ <u>Sycamore</u> 3/ <u>Nuttall oak</u> <u>Water oak</u>	2w9
<u>Blanton</u> 0-12% slopes	<u>Slash pine</u> <u>Loblolly pine</u> <u>Longleaf pine</u>	80 80 70+4	76-85 76-85 65-74	Slight	Moderate	Moderate	<u>Slash pine</u> <u>Longleaf pine</u>	3s2
<u>Boswell</u> 1-17% slopes	<u>Loblolly pine</u> <u>Slash pine</u> <u>Longleaf pine</u>	85+4 85 65+3	76-90 80-90 60-70	Slight	Moderate	Moderate	<u>Loblolly pine</u>	3c2
<u>Bowie</u> 0-12% slopes	<u>Loblolly pine</u> <u>Slash pine</u> <u>Longleaf pine</u>	86 86 72+5	80-92 80-92 63-76	Slight	Slight	Slight	<u>Loblolly pine</u> <u>Slash pine</u>	2o1



TABLE 2. SOIL RATINGS FOR WOODLAND USE  
Southern Coastal Plain and Coastal Flatwoods of Alabama and Mississippi

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Soils	Potential Productivity			Management Problems			Species Suitable for Planting	Ordination Woodland Suitability Group
	Tree Species	Avg. Site Index & Standard Deviation	Range of Site Index	Erosion Hazard	Equipment Restriction	Seedling Mortality		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<u>Brewton</u> 0-5% slopes	<u>Slash pine</u> <u>Loblolly pine</u> <u>Sweetgum</u> <u>Red oaks</u>	88 90 90 -	83-94 85-95 80-97 -	Slight	Moderate	Slight to Moderate	Loblolly pine Slash pine Sweetgum Sycamore Shumard oak	2w8
<u>Brogdon</u> 0-5% slopes	<u>Loblolly pine</u> <u>Slash pine</u> <u>Red oaks</u>	86 86 -	80-92 80-92 -	Slight	Slight	Slight	Slash pine Loblolly pine	2o1
<u>Byars</u> 0-2% slopes	<u>Loblolly pine</u> 1/ <u>Slash pine</u> 1/ <u>Sweetgum</u> 1/ <u>Tupelos</u> <u>Cypress</u> <u>Water oaks</u>	95 92 90 - - -	87-103 85-100 86-102 - - -	Slight	Severe 2/	Severe 2/	Loblolly pine 3/ Slash pine 3/ Sycamore 3/ Water tupelo	2w9
<u>Cahaba</u> lower slopes and terraces, 0-5% slopes	<u>Loblolly pine</u> <u>Slash pine</u> <u>Longleaf pine</u> <u>Sweetgum</u> <u>Red oaks</u> <u>White oaks</u> <u>Yellow-poplar</u> <u>Blackgum</u>	91+4 91 72+5 90 - - - -	85-96 85-96 67-78 80-100 - - - -	Slight	Slight	Slight	Slash pine Loblolly pine Yellow-poplar Cherrybark oak	2o7
upper slopes 1-25% slopes	<u>Loblolly pine</u> <u>Slash pine</u>	86 86	80-90 80-90	Slight	Slight	Slight	Slash pine Loblolly pine	2o1
<u>Carnegie</u> 0-12% slopes	<u>Slash pine</u> <u>Loblolly pine</u> <u>Longleaf pine</u>	86 86 70	80-92 80-92 64-75	Slight	Slight	Slight	Loblolly pine Slash pine	2o1
<u>Chastain</u> 0-2% slopes	<u>Slash pine</u> <u>Sweetgum</u> <u>Water oak</u> <u>Cottonwood</u> <u>Green ash</u> <u>Loblolly pine</u> <u>Tupelos</u> <u>Red oaks</u> <u>White oaks</u>	90 94+11 89+13 90 88+10 90+3 - - -	82-98 82-101 77-96 70-100 66-93 82-98 - - -	Slight	Severe	Moderate to Severe	Sycamore 3/ Cherrybark oak 3/ Sweetgum 3/ Loblolly pine 3/	2w9
<u>Chipley</u> 0-5% slopes	<u>Loblolly pine</u> <u>Slash pine</u> <u>Longleaf pine</u>	89+8 88+6 74+4	80-96 80-94 69-79	Slight	Moderate	Moderate	Slash pine Loblolly pine	2w2
<u>Cowarts</u> 0-12% slopes	<u>Slash pine</u> <u>Loblolly pine</u> <u>Longleaf pine</u>	86 86 67	80-92 80-92 62-73	Slight	Slight	Slight	Slash pine Loblolly pine	2o1
<u>Coxville</u> 0-2% slopes	<u>Loblolly pine</u> 1/ <u>Slash pine</u> 1/ <u>Longleaf pine</u> <u>Sweetgum</u> 1/ <u>Water oaks</u>	90+4 90 71+6 90 90	82-98 80-95 64-77 - -	Slight	Severe 2/	Severe 2/	Loblolly pine 3/ Slash pine 3/ Sycamore 3/ Sweetgum 3/	2w9



TABLE 2. SOIL RATINGS FOR WOODLAND USE

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Southern Coastal Plain and Coastal Flatwoods of Alabama and Mississippi

Soils	Potential Productivity			Management Problems			Species Suitable for Planting	Ordination Woodland Suitability Group
	Tree Species	Avg. Site Index & Standard Deviation	Range of Site Index	Erosion Hazard	Equipment Restriction	Seedling Mortality		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<u>Dothan</u> 0-8% slopes	<u>Slash pine</u> <u>Longleaf pine</u>	89+5 70	80-95 63-75	Slight	Slight	Slight	Slash pine Loblolly pine	2o1
<u>Dunbar</u> 0-5% slopes	<u>Loblolly pine</u> Slash pine Sweetgum Red oaks Blackgum	88+5 90 90 - -	80-96 80-96 - - -	Slight	Moderate	Moderate	Slash pine Loblolly pine Sycamore Sweetgum	2w8
<u>Duplin</u> 0-5% slopes	<u>Slash pine</u> Loblolly pine Sweetgum Blackgum Red oaks White oaks	90 90 90 - - -	80-96 80-96 - - - -	Slight	Moderate	Moderate	Slash pine Loblolly pine Sycamore Sweetgum	2w8
<u>Ellabelle</u> 0-2% slopes	<u>Loblolly pine</u> 1/ Slash pine 1/ Pond pine Sycamore Tupelos Cypress Blackgum Water oak	93 93 73 - - - - -	86-100 86-100 65-80 - - - - -	Slight	Severe 2/	Severe 2/	Slash pine 3/ Loblolly pine 3/ Sycamore 3/ Water tupelo	2w9
<u>Escambia</u> 0-2% slopes	<u>Slash pine</u> Loblolly pine Longleaf pine <u>Sweetgum</u> Red oaks	90 90 70 90 -	85-96 85-95 67-76 79-98 -	Slight	Moderate	Slight	Slash pine Loblolly pine Sweetgum Sycamore	2w8
<u>Esto</u> 1-17% slopes	<u>Loblolly pine</u> Slash pine Longleaf pine	82+6 82 66	76-88 76-88 60-72	Slight	Slight	Slight	Loblolly pine Slash pine	3o1
<u>Eustis</u> 1-25% slopes	<u>Loblolly pine</u> Slash pine Longleaf pine	84+4 85 64	78-89 78-88 60-70	Slight	Moderate	Moderate	Slash pine Loblolly pine Longleaf pine	3s2
<u>Faceville</u> 1-17% slopes	<u>Loblolly pine</u> Slash pine Longleaf pine	82 80 65	76-86 75-85 60-70	Slight	Slight	Slight	Loblolly pine	3o1
<u>Flomaton</u> 2-25% slopes	<u>Loblolly pine</u> Longleaf pine Shortleaf pine	70 60 60	66-75 55-64 56-65	Slight to Moderate	Slight to Moderate	Moderate	Longleaf pine Shortleaf pine	4f2
<u>Freemanville</u> 0-12% slopes	<u>Loblolly pine</u> Slash pine Longleaf pine	80 80 66	76-85 76-85 60-71	Slight	Slight	Slight	Loblolly pine	3o1
<u>Fuquay</u> 1-5% slopes	<u>Loblolly pine</u> Slash pine Longleaf pine	83+5 84 67+4	76-89 76-90 63-72	Slight	Slight	Moderate	Slash pine Longleaf pine	3s2
<u>Gilead</u> 1-17% slopes	<u>Loblolly pine</u>	83+5	76-90	Slight	Slight	Slight	Loblolly pine	3o1

TABLE 2. SOIL RATINGS FOR WOODLAND USE

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## Southern Coastal Plain and Coastal Flatwoods of Alabama and Mississippi

Soils	Potential Productivity			Management Problems			Species Suitable for Planting	Ordination Woodland Suitability Group
	Tree Species	Avg. Site Index & Standard Deviation	Range of Site Index	Erosion Hazard	Equipment Restriction	Seedling Mortality		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Gilead - Con't	Slash pine Longleaf pine	83 66±5	75-90 60-72				Slash pine	
<u>Goldsboro</u> 0-8% slopes	<u>Loblolly pine</u> Slash pine <u>Sweetgum</u> Blackgum Red oaks White oaks Longleaf pine	90±6 90 90 - - - 77±6	82-98 82-98 83-96 - - - 70-84	Slight	Moderate	Slight	Loblolly pine Sycamore Sweetgum Slash pine	2w8
<u>Grady</u> 0-2% slopes	<u>Loblolly pine</u> 1/ Slash pine 1/ Sweetgum 1/ Tupelos	90±6 88 90 -	82-98 80-95 82-98 -	Slight	Severe 2/	Severe 2/	Slash pine 3/ Loblolly pine 3/ Sweetgum 3/ Water tupelo	2w9
<u>Grasmere</u> 0-5% slopes	<u>Loblolly pine</u> Slash pine <u>Sweetgum</u> Red oaks White oaks	100 100 100 - -	95-105 95-105 93-106 - -	Slight	Slight	Slight	Slash pine Loblolly pine Yellow-poplar Cherrybark oak	1o7
<u>Greenville</u> 1-17% slopes	<u>Loblolly pine</u> Slash pine Longleaf pine	83±5 82 70	77-90 76-90 66-74	Slight	Slight	Slight	Loblolly pine	3o1
<u>Guin</u> 1-17% slopes	<u>Loblolly pine</u> Longleaf pine Shortleaf pine	70 60 60	66-75 55-63 56-65	Slight	Slight	Moderate	Shortleaf pine Longleaf pine Slash pine	4f2
<u>Harleston</u> 0-8% slopes	<u>Loblolly pine</u> Slash pine Sweetgum Water oaks Blackgum Red oaks White oaks	90 90 90 90 - - -	86-95 86-95 85-96 85-96 - - -	Slight	Moderate	Moderate	Loblolly pine Sweetgum Sycamore Slash pine	2w8
<u>Hazlehurst</u> 0-2% slopes	<u>Slash pine</u> Loblolly pine Longleaf pine Sweetgum Water oaks Red oaks	90 90 75 85 85 -	84-96 84-96 70-82 80-95 80-90 -	Slight	Moderate	Moderate	Loblolly pine Slash pine Sycamore Sweetgum	2w8
<u>Hyde</u> 0-2% slopes	<u>Loblolly pine</u> 1/ Slash pine 1/ Sweetgum 1/ Tupelos Cypress	96 96 97 - -	87-103 87-103 89-105 - -	Slight	Severe 2/	Severe 2/	Loblolly pine 3/ Slash pine 3/ Sweetgum 3/ Sycamore 3/ Water tupelo	1w9
<u>Irvington</u> 0-12% slopes	<u>Slash pine</u> Loblolly pine Longleaf pine Sweetgum Red oaks	86 86 68 85 -	80-92 80-92 63-73 80-92 -	Slight	Slight	Slight	Slash pine Loblolly pine Yellow-poplar Cherrybark oak	2o7

TABLE 2. SOIL RATINGS FOR WOODLAND USE

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## Southern Coastal Plain and Coastal Flatwoods of Alabama and Mississippi

Soils	Potential Productivity			Management Problems			Species Suitable for Planting	Ordination Woodland Suitability Group
	Tree Species	Avg. Site Index & Standard Deviation	Range of Site Index	Erosion Hazard	Equipment Restriction	Seedling Mortality		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<u>Iuka</u> 0-2% slopes	<u>Loblolly pine</u> Slash pine Sweetgum Water oak Cottonwood Yellow-poplar Red oaks White oaks Sycamore	97+7 100 102+6 100+9 100 - - - 105	90-105 92-105 90-109 88-107 80-115 85-110 - - 90-110	Slight	Moderate	Moderate	Loblolly pine Sweetgum Sycamore Cottonwood Yellow-poplar Cherrybark oak	1w8
<u>Izagora</u> 0-5% slopes	<u>Loblolly pine</u> Sweetgum Yellow-poplar Red oaks White oaks	90 90 - - -	86-95 80-100 - - -	Slight	Moderate	Moderate	Loblolly pine Sweetgum Slash pine Yellow-poplar	2w8
<u>Johnston</u> 0-2% slopes	<u>Sweetgum 1/</u> <u>Water oak 1/</u> <u>Loblolly pine 1/</u> <u>Slash pine 1/</u> Tupelos Cypress Red oaks White oaks	111 103 97 95 - - - -	99-113 90-110 87-103 85-100 - - - -	Slight	Severe 2/	Severe 2/	Sweetgum 3/ Water tupelo Loblolly pine 3/ Slash pine 3/	1w9
<u>Kalmia</u> lower slopes and terraces 0-5% slopes	<u>Loblolly pine</u> <u>Slash pine</u> Sweetgum Yellow-poplar Red oaks White oaks Blackgum	88 88 85 - - - -	81-93 81-93 80-90 - - - -	Slight	Slight	Slight	Slash pine Yellow-poplar Loblolly pine Cherrybark oak	2o7
upper slopes 1-25% slopes	<u>Loblolly pine</u> <u>Slash pine</u>	86 86	81-90 81-90	Slight	Slight	Slight	Slash pine Loblolly pine	2o1
<u>Kershaw</u> 1-17% slopes	<u>Slash pine</u> <u>Longleaf pine</u>	65 55	55-70 50-60	Slight	Moderate	Severe	Longleaf pine Sand pine Slash pine	5s3
<u>Lakeland</u> 1-25% slopes	<u>Loblolly pine</u> <u>Slash pine</u> <u>Longleaf pine</u>	75+5 75 61+4	69-81 67-81 56-66	Slight	Moderate	Severe	Longleaf pine Slash pine	4s3
<u>Latonia</u> 0-8% slopes	<u>Loblolly pine</u> <u>Slash pine</u> <u>Longleaf pine</u>	90 90 70	86-95 86-95 65-75	Slight	Slight	Slight	Slash pine Loblolly pine	2o1
<u>Leaf</u> 0-2% slopes	<u>Loblolly pine 1/</u> <u>Slash pine 1/</u> Sweetgum Red oaks White oaks Water oaks	91+5 90 - - - -	84-100 84-100 75-90 - - -	Slight	Severe	Severe	Loblolly pine 3/ Sweetgum 3/ Shumard oak	2w9
<u>Leefield</u> 0-5% slopes	<u>Loblolly pine</u>	82	74-90	Slight	Moderate	Slight to Moderate	Loblolly pine	3w2

TABLE 2. SOIL RATINGS FOR WOODLAND USE

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Southern Coastal Plain and Coastal Flatwoods of Alabama and Mississippi

Soils	Potential Productivity			Management Problems			Species Suitable for Planting	Ordination Woodland Suitability Group
	Tree Species	Avg. Site Index & Standard Deviation	Range of Site Index	Erosion Hazard	Equipment Restriction	Seedling Mortality		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Leefield- Con't	Slash pine Longleaf pine	82 68	75-89 63-73				Slash pine	
<u>Lenoir</u> 0-5% slopes	<u>Loblolly pine</u> Slash pine Sweetgum Water oaks Red oaks	86+5 86 88 87 -	75-92 78-92 84-95 83-95 -	Slight	Moderate	Moderate	Loblolly pine Slash pine Sycamore	2w8
<u>Leon</u> 0-5% slopes	Loblolly pine Slash pine <u>Longleaf pine</u>	74 74 65+6	67-83 67-83 58-71	Slight	Moderate	Moderate	Slash pine Longleaf pine	4w2
<u>Lucedale</u> 1-17% slopes	<u>Slash pine</u> Loblolly pine Longleaf Red oaks	90 90 75 -	86-95 86-95 70-80 -	Slight	Slight	Slight	Slash pine Loblolly pine	2o1
<u>Lucy</u> 1-25% slopes	<u>Loblolly pine</u> Slash pine Longleaf pine	84+4 84 71+5	79-89 79-89 64-77	Slight	Moderate	Moderate	Slash pine Longleaf pine	3s2
<u>Luverne</u> 1-17% slopes	<u>Loblolly pine</u> Slash pine Longleaf pine	85 85 70	80-90 80-90 65-75	Slight	Moderate	Slight to Moderate	Loblolly pine	3c2
<u>Lynchburg</u> 0-5% slopes	<u>Slash pine</u> Loblolly pine Sweetgum Yellow-poplar Blackgum Red oaks Longleaf pine	91+4 86+4 90 95 - - 74+5	79-94 79-94 85-95 90-100 - - 68-80	Slight	Moderate	Slight to Moderate	Loblolly pine Sweetgum Sycamore Slash pine Yellow-poplar	2w8
<u>Magnolia</u> loamy sand to sandy loam 1-17% slopes	<u>Loblolly pine</u> Slash pine Longleaf pine	82+6 82 61	76-88 76-88 56-66	Slight	Slight	Slight	Loblolly pine Slash pine	3o1
sandy clay to clay, eroded 5-17% slopes	<u>Loblolly pine</u>	76	70-82	Moderate	Moderate	Moderate	Loblolly pine	3c2
<u>Mantachie</u> 0-2% slopes	<u>Loblolly pine</u> 1/ Slash pine 1/ <u>Sweetgum</u> Water oak Cottonwood Green ash Sycamore Tupelos Red oaks White oaks Hackberry	98+7 96 100+6 94+5 92 88+10 - - - - -	90-105 87-103 88-107 82-101 72-102 66-93 - - - - -	Slight	Severe	Moderate	Loblolly pine Cottonwood Sweetgum Slash pine Green ash Sycamore Nuttall oak	1w8



TABLE 2. SOIL RATINGS FOR WOODLAND USE

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Southern Coastal Plain and Coastal Flatwoods of Alabama and Mississippi

Soils	Potential Productivity			Management Problems			Species Suitable for Planting	Ordination Woodland Suitability Group
	Tree Species	Avg. Site Index & Standard Deviation	Range of Site Index	Erosion Hazard	Equipment Restriction	Seedling Mortality		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<u>Marlboro</u> loamy sand to fine sandy loam, 1-17% slopes	<u>Loblolly pine</u> Slash pine Longleaf pine	82+6 82 62	76-89 77-89 57-66	Slight	Slight	Slight	Loblolly pine Slash pine	3o1
clay loam to clay, eroded 5-17% slopes	<u>Loblolly pine</u>	77	70-83	Moderate	Moderate	Moderate	Loblolly pine	3c2
<u>Mashulaville</u> 0-2% slopes	<u>Sweetgum</u> 1/ Water oak 1/ <u>Loblolly pine</u> Red oaks White oaks	78 73 80 - -	70-85 65-80 72-88 - -	Slight	Severe 2/	Severe 2/	Sweetgum 3/ Loblolly pine 3/ Nuttall oak	3w9
<u>Mayhew</u> 0-5% slopes	<u>Sweetgum</u> 1/ Water oak 1/ <u>Loblolly pine</u> 1/ Sycamore Cottonwood Slash pine 1/	90 90 86+6 - - 85	- - 80-95 - 80-95 -	Slight	Severe 2/	Severe 2/	Loblolly pine 3/ Slash pine 3/ Sweetgum 3/ Sycamore 3/	2w9
<u>McLaurin</u> 1-17% slopes	<u>Loblolly pine</u> Slash pine Longleaf pine	90 90 72	86-95 86-95 66-75	Slight	Slight	Slight	Loblolly pine Slash pine	2o1
<u>Myatt</u> 0-2% slopes	<u>Loblolly pine</u> 1/ <u>Sweetgum</u> 1/ Water oak Red oaks White oaks Sycamore Tupelos Slash pine 1/	95+6 92 86 - - - - 92	87-103 77-99 71-93 - - - - 85-100	Slight	Severe 2/	Severe 2/	Loblolly pine 3/ Sweetgum 3/ Shumard oak Slash pine 3/	2w9
<u>Norfolk</u> 1-17% slopes	<u>Loblolly pine</u> Slash pine Longleaf pine	86+5 86 68+4	78-92 78-92 63-73	Slight	Slight	Slight	Slash pine Loblolly pine	2o1
<u>Ochlocknee</u> 0-5% slopes	<u>Loblolly pine</u> Slash pine Sweetgum Yellow- poplar Red oaks White oaks Cottonwood Sycamore Water oak	98+5 98 90+5 - - - - - 82	95-105 94-105 78-100 85-115 - - 80-110 80-110 70-89	Slight	Slight	Slight	Slash pine Loblolly pine Yellow-poplar Cherrybark oak Sycamore	1o7
<u>Ora</u> 0-12% slopes	<u>Loblolly pine</u> Slash pine Longleaf pine Sweetgum Red oaks White oaks	86+6 86 70 86 - -	80-95 80-95 65-75 80-92 - -	Slight	Slight	Slight	Loblolly pine Slash pine Yellow-poplar	2o7

TABLE 2. SOIL RATINGS FOR WOODLAND USE

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Southern Coastal Plain and Coastal Flatwoods of Alabama and Mississippi

Soils	Potential Productivity			Management Problems			Species Suitable for Planting	Ordination Woodland Suitability Group
	Tree Species	Avg. Site Index & Standard Deviation	Range of Site Index	Erosion Hazard	Equipment Restriction	Seedling Mortality		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<u>Orangeburg</u> 1-25% slopes	<u>Loblolly pine</u> <u>Slash pine</u> <u>Longleaf pine</u>	86+5 86 70	80-92 80-92 65-75	Slight	Slight	Slight	Slash pine Loblolly pine	2o1
<u>Osier</u> 0-2% slopes	<u>Slash pine</u> 1/ <u>Loblolly pine</u> 1/ <u>Longleaf pine</u> 1/	80 80 68	72-88 72-88 62-73	Slight	Severe 2/	Severe 2/	Slash pine 3/	3w3
<u>Pansey</u> 0-2% slopes	<u>Loblolly pine</u> 1/ <u>Slash pine</u> 1/ <u>Longleaf pine</u> 1/ <u>Sweetgum</u> 1/ <u>Water oak</u> <u>Red oaks</u> <u>White oaks</u>	82+6 80 65 80 - - -	77-92 72-88 65-75 75-85 - - -	Slight	Severe	Severe	Slash pine 3/ Loblolly pine 3/ Sweetgum 3/ Shumard oak	3w9
<u>Pantego</u> 0-2% slopes	<u>Loblolly pine</u> 1/ <u>Slash pine</u> 1/ <u>Pond pine</u> <u>Cypress</u> <u>Tupelos</u> <u>Water oak</u>	98+5 96 73+5 - - -	88-104 82-98 67-79 - - -	Slight	Severe 2/	Severe 2/	Slash pine 3/ Sweetgum 3/ Sweetgum 3/ Loblolly pine 3/ Water tupelo	1w9
<u>Pelham</u> 0-2% slopes	<u>Slash pine</u> 1/ <u>Loblolly pine</u> 1/ <u>Longleaf pine</u> 1/ <u>Tupelos</u>	90+2 90 74 -	82-98 82-98 66-80 -	Slight	Severe 2/	Severe 2/	Slash pine 3/ Loblolly pine 3/	2w3
<u>Pheba</u> 0-5% slopes	<u>Slash pine</u> <u>Loblolly pine</u> <u>Sweetgum</u> <u>Water oaks</u> <u>Red oaks</u>	90 90 - - -	77-93 82-98 80-100 80-100 -	Slight	Moderate	Moderate	Slash pine Loblolly pine	2w8
<u>Plummer</u> 0-2% slopes	<u>Slash pine</u> 1/ <u>Loblolly pine</u> 1/ <u>Longleaf pine</u> 1/ <u>Tupelos</u>	88+5 91 70 -	77-93 80-95 64-75 -	Slight	Severe 2/	Severe 2/	Slash pine 3/ Loblolly pine 3/	2w3
<u>Poarch</u> 0-5% slopes	<u>Slash pine</u> <u>Loblolly pine</u> <u>Longleaf pine</u>	90 90 73	85-95 85-95 66-78	Slight	Slight	Slight	Slash pine Loblolly pine	2o1
<u>Ponzer</u> 0-2% slopes	<u>Tupelos</u> <u>Cypress</u> <u>Pond pine</u> <u>Red maple</u> <u>Slash pine</u> 1/	- - 60 - 70	- - - - 65-80	Slight	Severe 2/	Severe 2/	Slash pine 3/	4w3
<u>Pooler</u> 0-2% slopes	<u>Loblolly pine</u> 1/ <u>Slash pine</u> 1/ <u>Red oaks</u> <u>Tupelos</u> <u>Sweetgum</u>	95 95 - - 90	86-101 86-101 - - 80-100	Slight	Severe 2/	Severe 2/	Loblolly pine 3/ Slash pine 3/ Sycamore 3/ Nuttall oak	2w9



TABLE 2. SOIL RATINGS FOR WOODLAND USE  
Southern Coastal Plain and Coastal Flatwoods of Alabama and Mississippi

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Soils	Potential Productivity			Management Problems			Species Suitable for Planting	Ordination Woodland Suitability Group
	Tree Species	Avg. Site Index & Standard Deviation	Range of Site Index	Erosion Hazard	Equipment Restriction	Seedling Mortality		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<u>Portsmouth</u> 0-2% slopes	<u>Loblolly pine</u> 1/ <u>Slash pine</u> 1/ <u>Sweetgum</u> 1/ <u>Pond pine</u> <u>Cypress</u> <u>Tupelos</u>	96 96 - - - -	85-101 82-98 - - - -	Slight	Severe 2/	Severe	<u>Slash pine</u> 3/ <u>Loblolly pine</u> 3/ <u>Sycamore</u> 3/	1w9
<u>Quitman</u> 0-5% slopes	<u>Loblolly pine</u> <u>Slash pine</u> <u>Sweetgum</u> <u>Water oaks</u> <u>Red oaks</u>	92 90 93+4 90 -	82-98 77-93 85-95 80-95 -	Slight	Moderate	Moderate	<u>Slash pine</u> <u>Sweetgum</u> <u>Yellow-poplar</u> <u>Sycamore</u>	2w8
<u>Rains</u> 0-2% slopes	<u>Slash pine</u> <u>Loblolly pine</u> <u>Sweetgum</u> <u>Red oaks</u> <u>Tupelos</u>	91+5 94+5 90 - -	81-97 84-100 80-100 - -	Slight	Severe	Severe	<u>Slash pine</u> <u>Loblolly pine</u>	2w3
<u>Red Bay</u> 1-17% slopes	<u>Loblolly pine</u> <u>Slash pine</u> <u>Longleaf pine</u>	90 90 70	85-95 85-95 65-75	Slight	Slight	Slight	<u>Loblolly pine</u> <u>Slash pine</u>	2o1
<u>Riverview</u> 0-5% slopes	<u>Loblolly pine</u> <u>Slash pine</u> <u>Yellow-poplar</u> <u>Sweetgum</u> <u>Red oaks</u>	97 97 120 110 -	93-103 93-103 110-125 105-115 -	Slight	Slight	Slight	<u>Slash pine</u> <u>Loblolly pine</u> <u>Yellow-poplar</u> <u>Sycamore</u> <u>Cottonwood</u>	1o7
<u>Robertsdale</u> 0-5% slopes	<u>Loblolly pine</u> <u>Slash pine</u> <u>Sweetgum</u> <u>Blackgum</u> <u>Red oaks</u>	90 90 83 - -	85-96 85-96 80-90 - -	Slight	Moderate	Moderate	<u>Loblolly pine</u> <u>Sweetgum</u> <u>Sycamore</u> <u>Slash pine</u>	2w8
<u>Ruston</u> 1-25% slopes	<u>Slash pine</u> <u>Loblolly pine</u> <u>Longleaf pine</u>	91 91 74	86-96 86-96 68-79	Slight	Slight	Slight	<u>Slash pine</u> <u>Loblolly pine</u>	2o1
<u>Rutledge</u> 0-2% slopes	<u>Slash pine</u> <u>Loblolly pine</u> <u>Tupelos</u> <u>Cypress</u>	86 86 - -	78-94 78-94 - -	Slight	Severe	Severe	<u>Slash pine</u> <u>Loblolly pine</u>	2w3
<u>Saffell</u> 1-25% slopes	<u>Slash pine</u> <u>Loblolly pine</u> <u>Longleaf pine</u>	75 75 60	70-80 70-80 55-65	Slight	Slight to Moderate	Moderate	<u>Longleaf pine</u> <u>Slash pine</u> <u>Shortleaf pine</u>	4f2
<u>Savannah</u> 0-12% slopes	<u>Loblolly pine</u> <u>Slash pine</u> <u>Sweetgum</u> <u>White oaks</u> <u>Longleaf pine</u>	88 88 85 - 78+5	83-94 83-94 80-92 - 70-83	Slight	Slight	Slight	<u>Loblolly pine</u> <u>Yellow-poplar</u> <u>Sycamore</u>	2o7

TABLE 2. SOIL RATINGS FOR WOODLAND USE

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Southern Coastal Plain and Coastal Flatwoods of Alabama and Mississippi

Soils	Potential Productivity			Management Problems			Species Suitable for Planting	Ordination Woodland Suitability Group
	Tree Species	Avg. Site Index & Standard Deviation	Range of Site Index	Erosion Hazard	Equipment Restriction	Seedling Mortality		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<u>Sawyer</u> 0-5% slopes	<u>Loblolly pine</u> Slash pine Sweetgum Red oaks White oaks Blackgum	90 90 90 - - -	85-95 85-95 84-96 - - -	Slight	Moderate	Slight	Loblolly pine Slash pine Sweetgum Sycamore Yellow-poplar	2w8
<u>Scranton</u> 0-2% slopes	<u>Slash pine</u> Loblolly pine Longleaf pine Sweetgum Red oaks	83 83 68 - -	72-88 72-88 62-75 - -	Slight	Moderate	Moderate	Slash pine	3w2
<u>Shubuta</u> 1-25% slopes	<u>Loblolly pine</u> Slash pine Longleaf pine	84 82 70	76-87 76-87 66-75	Slight	Slight	Slight	Loblolly pine Slash pine	3o1
sandy clay to silty clay, eroded, 5-25% slopes	<u>Loblolly pine</u>	76	70-80	Moderate	Moderate	Moderate	Loblolly pine	3c2
<u>Smithon</u> 0-2% slopes	<u>Loblolly pine 1/</u> Water oaks 1/ <u>Sweetgum 1/</u> Tupelos Red maple	90 90 90 - -	85-95 85-95 80-100 - -	Slight	Severe 2/Severe 2/	2/Severe 2/	Loblolly pine 3/ Slash pine 3/ Nuttall oak Sweetgum 3/	2w9
<u>Splendora</u> 0-5% slopes	<u>Loblolly pine</u> <u>Sweetgum</u> Water oak Red oaks	94 +4 90 - -	84-100 85-96 - -	Slight	Moderate	Moderate	Loblolly pine Slash pine Sweetgum Sycamore	2w8
<u>Stough</u> 0-5% slopes	Slash pine <u>Loblolly pine</u> Sweetgum Water oaks Red oaks White oaks Blackgum	86 90+5 83 85 - - -	77-93 82-98 75-90 80-90 - - -	Slight	Moderate	Moderate	Slash pine Loblolly pine Sycamore Sweetgum	2w8
<u>Sunsweet</u> 0-12% slopes	<u>Slash pine</u> Loblolly pine Longleaf pine	84 84 65	76-90 76-90 60-70	Slight	Moderate	Moderate	Loblolly pine	3c2
<u>Susquehanna</u> 1-25% slopes	<u>Loblolly pine</u> Slash pine Longleaf pine	82+6 82 65	75-89 75-89 60-68	Slight to Moderate	Moderate	Moderate	Loblolly pine	3c2
<u>Sweatman</u> 1-25% slopes	Loblolly pine Slash pine Longleaf pine	80 80 65	75-86 75-86 60-70	Slight to Moderate	Moderate	Moderate	Loblolly pine	3c2
<u>Tifton</u> 1-17% slopes	<u>Slash pine</u> Loblolly pine Longleaf pine	86 86 68+4	80-92 80-92 63-73	Slight	Slight	Slight	Slash pine Loblolly pine	2o1

Southern Coastal Plain and Coastal Flatwoods of Alabama and Mississippi

U. S. DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE, FORT WORTH, TEXAS  
USDA-SCS-FORT WORTH, TEX 1969  
4-28825 1-70

Table 3, SOIL GROUPINGS ACCORDING TO WOODLAND SUITABILITY, is a summary of the most important interpretations for a woodland suitability group of soils.

Column one (1) includes the suitability group symbol and a brief description of the group of soils, including their important hazards and limitations for woodland use and management.

Column two (2) is a tabulation of the soils within each woodland suitability group.

Column three (3) is a list of some commercially-important tree species which occur on the soils in each suitability group.

Column four (4) shows the site class (site index rounded off to the nearest 10-foot interval) for the most important tree species listed in column three.

Column five (5) lists some of the most important tree species which are suitable for planting or direct seeding on the soils in each suitability group.

TABLE 3. SOIL GROUPINGS ACCORDING TO WOODLAND SUITABILITY

Page 1 of 4

Southern Coastal Plain and Coastal Flatwoods of Alabama and Mississippi - 30 to 40 Inch Frost-free Rainfall

Woodland Suitability Group (Symbol and Description)	Soils	Productivity		Species Suitable for Planting
		Tree Species	Site Class	
(1)	(2)	(3)	(4)	(5)
<u>1o7</u> Very highly productive soils with no serious management problems; suitable for broadleaf and/or needleleaf trees.	Grasmere, 0-5% slopes Ochlockonee, 0-5% slopes Riverview, 0-5% slopes	Slash pine Loblolly pine Sweetgum Water oak Yellow-poplar Red oaks White oaks Sycamore	100 100 90 80 100 - - 100	Slash pine Loblolly pine Cottonwood Yellow-poplar Black walnut Sycamore Cherrybark oak
<u>1w8</u> Seasonally wet soils with very high potential productivity; moderate equipment restrictions and slight to moderate seedling mortality; suitable for broadleaf and/or needleleaf trees.	Iuka, 0-2% slopes Mantachie, 0-2% slopes Verona, 0-2% slopes	Loblolly pine Slash pine Sweetgum Water oak White oak Sycamore Cottonwood Red oaks White ash Cherrybark oak	100 100 100 100 90 100 100 - 90 100	Slash pine Loblolly pine Sycamore Cottonwood Yellow-poplar Cherrybark oak
<u>1w9</u> Excessively wet soils with very high potential productivity; severe equipment restrictions and seedling mortality except on areas with adequate surface drainage; suitable for broadleaf and/or needleleaf trees.	Hyde, 0-2% slopes Johnston, 0-2% slopes Pantego, 0-2% slopes Portsmouth, 0-2% slopes	Sweetgum <u>1/</u> Water oak Loblolly pine <u>1/</u> Tupelos Cypress White ash Red maple Yellow-poplar <u>1/</u>	100+ 100 100 - - - - 110	Slash pine <u>2/</u> Loblolly pine <u>2/</u> Water tupelo Sycamore <u>2/</u> Sweetgum <u>2/</u> Shumard oak <u>2/</u>
<u>2o1</u> Soils with high potential productivity; no serious management problems; best suited for southern pines.	Aycock, 0-12% slopes Benndale, 0-12% slopes Baxterville, 0-12% slopes Bowie, 0-12% slopes Brogdon, 0-5% slopes Cahaba, (upper slopes) 1-25% slopes Carnegie, 0-12% slopes Cowarts, 0-12% slopes Dothan, 0-8% slopes Kalmia, (upper slopes) 1-25% slopes Latonia, 0-8% slopes Lucedale, 1-17% slopes McLaurin, 1-17% slopes Norfolk, 1-17% slopes Orangeburg, 1-25% slopes Poarch, 0-5% slopes Red Bay, 1-17% slopes Ruston, 1-25% slopes Tifton, 1-17% slopes	Slash pine Loblolly pine Longleaf pine	90 90 70	Loblolly pine Slash pine
<u>2o7</u> Soils with high potential productivity; no serious management problems; suitable for needleleaf and/or broadleaf trees.	Cahaba (lower slopes and terraces), 0-5% slopes Irrington, 0-12% slopes Kalmia, (lower slopes and terraces), 0-5% slopes Ora, 0-12% slopes Savannah, 0-12% slopes	Slash pine Loblolly pine Yellow-poplar Sycamore Sweetgum Red oaks White oaks	90 90 - - - - -	Slash pine Loblolly pine Yellow-poplar Black walnut Cherrybark oak

1/ Potential productivity attainable only on areas with adequate surface drainage.

2/ Tree planting feasible only on areas with adequate surface drainage.



TABLE 3. SOIL GROUPINGS ACCORDING TO WOODLAND SUITABILITY

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Southern Coastal Plain and Coastal Flatwoods of Alabama and Mississippi - 30 to 40 Inch Frost-free Rainfall

Woodland Suitability Group (Symbol and Description) (1)	Soils (2)	Productivity		Species Suitable for Planting (5)
		Tree Species (3)	Site Class (4)	
<u>2w2</u> Seasonally wet soils with high potential productivity; moderate equipment restrictions and slight to moderate seedling mortality; best suited for southern pines.	Alapaha, 0-5% slopes Chipley, 0-5% slopes	Slash pine Loblolly pine	90 90	Slash pine Loblolly pine
<u>2w3</u> Excessively wet soils with high potential productivity; severe equipment limitations and seedling mortality on flooded areas, best suited for southern pines with adequate surface drainage.	Pelham, 0-2% slopes Plummer, 0-2% slopes Rains, 0-2% slopes Rutledge, 0-2% slopes	Slash pine <u>1</u> / Loblolly pine <u>1</u> /	90 90	Slash pine Loblolly pine
<u>2w8</u> Seasonally wet soils with high potential productivity; moderate equipment restrictions and slight to moderate seedling mortality, suitable for broadleaf and/or needleleaf trees.	Angie, 0-8% slopes Ardilla, 0-5% slopes Basin, 0-5% slopes Brewton, 0-5% slopes Dunbar, 0-5% slopes Duplin, 0-5% slopes Escambia, 0-2% slopes Goldsboro, 0-8% slopes Harleston, 0-8% slopes Hazlehurst, 0-2% slopes Izagora, 0-5% slopes Lenoir, 0-5% slopes Lynchburg, 0-5% slopes Pheba, 0-5% slopes Quitman, 0-5% slopes Robertsdale, 0-5% slopes Sawyer, 0-5% slopes Splendora, 0-5% slopes Stough, 0-5% slopes Waheee, 0-5% slopes	Loblolly pine Slash pine Sweetgum Water oak White oaks Red oaks	90 90 90 90 - -	Loblolly pine Slash pine Sweetgum Yellow-poplar Cherrybark oak
<u>2w9</u> Excessively wet soils with high potential productivity; severe equipment restrictions and seedling mortality except on areas with adequate surface drainage, suitable for broadleaf and/or needleleaf trees with adequate surface drainage.	Adaton, 0-2% slopes Amy, 0-2% slopes Bayboro, 0-2% slopes Bibb, 0-2% slopes Byars, 0-2% slopes Chastain, 0-2% slopes Coxville, 0-2% slopes Ellabelle, 0-2% slopes Grady, 0-2% slopes Leaf, 0-2% slopes Mayhew, 0-5% slopes Myatt, 0-2% slopes Pooler, 0-2% slopes Smithton, 0-2% slopes Trebloc, 0-2% slopes Weston, 0-2% slopes Bladen, 0-2% slopes	Loblolly pine <u>1</u> / Slash pine <u>1</u> / Sweetgum <u>1</u> / Green ash Red oaks White oaks Red maple Tupelos	90 90 90 - - - - -	Loblolly pine <u>2</u> / Slash pine <u>2</u> / Sweetgum <u>2</u> / Water tupelo Sycamore <u>2</u> / Shumard oak <u>2</u> /



TABLE 3. SOIL GROUPINGS ACCORDING TO WOODLAND SUITABILITY

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Southern Coastal Plain and Coastal Flatwoods of Alabama and Mississippi - 30 to 40 Inch Frost-free Rainfall

Woodland Suitability Group (Symbol and Description) (1)	Soils (2)	Productivity		Species Suitable for Planting (5)
		Tree Species (3)	Site Class (4)	
<u>3o1</u> Soils with moderately high productivity and no serious management problems; best suited for southern pines.	Esto, 1-17% slopes Faceville, 1-17% slopes Freemanville, 1-12% slopes Gilead, 1-17% slopes Magnolia, 1-17% slopes Marlboro, 1-17% slopes Shubuta, 1-17% slopes	Loblolly pine Slash pine Longleaf pine	80 80 60-70	Slash pine Loblolly pine
<u>3c2</u> Clayey soils with moderately high productivity; moderate equipment restrictions and seedling mortality; best suited for needleleaf trees.	Boswell, 1-17% slopes Luverne, 1-17% slopes Magnolia, eroded, 5-17% slopes Marlboro, eroded, 5-17% slopes Shubuta, eroded, 5-17% slopes Sunsweet, 0-12% slopes Susquehanna, 1-25% slopes Sweatman, 1-25% slopes Wilcox, 0-12% slopes	Loblolly pine Slash pine Longleaf pine	80 80 60-70	Loblolly pine
<u>3s2</u> Sandy soils with moderately high potential productivity; moderate seedling mortality and slight to moderate equipment restrictions; best suited for southern pines.	Alaga, 0-25% slopes Americus, 0-17% slopes Blanton, 0-12% slopes Eustis, 1-25% slopes Fuquay, 1-25% slopes Lucy, 1-25% slopes Troup, 1-25% slopes Wagram, 1-25% slopes	Slash pine Loblolly pine Longleaf pine	80 80 60-70	Slash pine Loblolly pine Longleaf pine
<u>3w2</u> Seasonally wet soils with moderately high potential productivity; moderate equipment restrictions and slight to moderate seedling mortality; best suited for needleleaf trees.	Albany, 0-5% slopes Barth, 0-5% slopes Leefield, 0-5% slopes Scranton, 0-2% slopes	Slash pine Loblolly pine Longleaf pine	80 80 70	Slash pine Loblolly pine
<u>3w3</u> Excessively wet soils with moderately high potential productivity; severe equipment limitations and seedling mortality except on areas with adequate surface drainage; best suited for needleleaf trees.	Osier, 0-2% slopes	Slash pine <u>1</u> / Loblolly pine <u>1</u> /	80 80	Slash pine <u>2</u> / Loblolly pine <u>2</u> /
<u>3w9</u> Excessively wet soils with moderately high potential productivity; severe equipment limitations and seedling mortality except on areas with adequate surface drainage; suitable for broadleaf and/or needleleaf trees.	Atmore, 0-2% slopes Mashulaville, 0-2% slopes Pansy, 0-2% slopes	Loblolly pine <u>1</u> / Sweetgum <u>1</u> / Water oak Red oaks White oaks	80 80 70 - -	Sweetgum <u>2</u> / Loblolly pine <u>2</u> / Shumard oak <u>2</u> /

Woodland Suitability Group (Symbol and Description)	Soils	Productivity		Species Suitable for Planting
		Tree Species	Site Class	
(1)	(2)	(3)	(4)	(5)
<u>4f2</u> Gravelly soils with moderate productivity; moderate seedling mortality; best suited for southern pines.	Flomaton, 2-25% slopes Guin, 1-17% slopes Saffell, 1-25% slopes	Loblolly pine Slash pine Longleaf pine	70 70 60	Longleaf pine Shortleaf pine Slash pine
<u>4s3</u> Sandy soils with moderate productivity; severe seedling mortality and slight to moderate equipment restrictions; best suited for southern pines.	Lakeland, 1-25% slopes	Slash pine Longleaf pine Loblolly pine	70 60 70	Slash pine Longleaf pine Sand pine
<u>4w2</u> Seasonally wet soils with moderate productivity; moderate equipment limitations and seedling mortality; best suited for southern pines.	Leon, 0-5% slopes	Loblolly pine Slash pine Longleaf pine	70 70 60	Slash pine Loblolly pine
<u>4w3</u> Excessively wet soils with moderate potential productivity; severe equipment limitations and seedling mortality; suitable for needleleaf trees with adequate surface drainage.	Ponzer, 0-2% slopes	Slash pine Loblolly pine	70 70	Loblolly pine <u>2/</u> Slash pine <u>2/</u>
<u>5s3</u> Sandy soils with low productivity; severe seedling mortality and slight to moderate equipment restrictions; best suited for southern pines.	Kershaw, 1-17% slopes	Longleaf pine Slash pine	50 60	Longleaf pine Sand pine Slash pine



